### 1 Q: YOU ARE PROPOSING TO USE THESE NUMBERS IN A NOVEL WAY, IS

#### 2 THAT CORRECT?

- 3 Yes, we are the first company to attempt to utilize these special numbers for this purpose. It
- 4 makes tremendous sense, since they are by design non-geographical, and IP endpoints are
- 5 themselves non-geographical. Furthermore, the fact that they are NANPA allocated should
- 6 lower the barrier to adoption, although so far, the fact that they are a formal NANP allocation
- 7 hasn't convinced AT&T much to load them into routing. Also, many ESPs are weary of
- 8 adopting PSTN emulation with standard 10-digit numbers, since most are now aware that that
- 9 practice is problematic in the long term, since the adoption of those numbers opens them to
- potential access charges from companies such as AT&T.

### 11 Q: DID NANPA PROVIDE ANY RESISTANCE TO YOUR REQUEST?

- 12 A: No, they did not. Initially, they were somewhat puzzled by the request since, as I said, no
- one had ever requested this kind of allocation before. But they proceeded very reasonably. First
- 14 they suspended the application until such time as they could better understand our request. At
- 15 this point we were skeptical that we would receive fair treatment since we are often on the
- receiving end of dilatory tactics. However, to our surprise we later learned that in the interim
- 17 while the application was suspended. NANPA actually went to the FCC for guidance on the
- subject. They returned to us with a number of requests, some for specific forecasts, and in
- particular, a representation whether they were going to be used for an enhanced service through
- 20 UTEX or through another company. In our response, we responded with forecasts and a
- 21 description of the offering:
- 22 Substantiation for Initial Request We currently provide around 100 million
- 23 minutes a month of origination and termination traffic with our non-geographic
- enhanced service provider (ESP) customers. These customers plan to rapidly
- deploy our Skype-like IM service. Our forecast of 15 codes per year and initial

- request for 7 N00-NXX's is based on this demand. Please keep in mind that the details provided in this message are proprietary and confidential.
- With this information, UTEX was granted an initial allocation and we were told that we could
- 4 request further allocations when we utilized the numbers we had received.

### 5 O: ONCE YOU RECEIVED THE ALLOCATION, WERE YOU THEN ABLE TO

### 6 START SELLING THE SERVICE?

- 7 A: No. The allocation is only one part of being able to offer the numbers. Once allocated,
- 8 we needed to get them loaded into routing. Since our desire is to provide interoperation of the
- 9 PSTN with ESP users, we desired to have the traffic reach our network through our SS7
- 10 interconnected switch.

1]

19

### O: HOW DID YOU TRY TO ACHIEVE THIS?

- 12 A: Since we were not able to publish 500 numbers in the Local Exchange Routing Guide
- 13 ("LERG"), we had to pursue an alternative approach.<sup>3</sup> Initially we sent a letter to the majority of
- the LECs, CMRS carriers, and CLECs in Texas, alerting them of the allocation, and requesting
- that they load our numbers into routing. We received very few responses, and of those that we
- did receive, most stated that they would not act until AT&T acted. A very small number agreed
- 17 to meet with us to discuss the opportunity, but it was clear that until AT&T loaded the numbers,
- there would be no movement from the larger carriers.

### Q: SO HOW DID YOU APPROACH AT&T ABOUT ROUTING?

- 20 A: We took two steps. First, we approached our account representative, who in her typical
- fashion deferred to her superiors, and eventually denied our request. We had informed AT&T of
- our intent to create a non-geographic originating product much earlier. In discussions preceding

<sup>&</sup>lt;sup>3</sup> The LERG is simply not designed to adopt the conventions and capabilities of new technology. LERG represents a very limited and dated view of basically how things worked twenty-five years ago. It can't understand new technology.

the join testing, Mr. Feldman informed Mr. Cole of this. [See Exhibit 505: RFP-1-10-9629 to 1 RFP-1-10-9635]. The context of this discussion was very important, as it was the first time that 2 3 AT&T informed UTEX that AT&T only counted CPN as delivered if it mapped on to a 10-digit NANP number, irrespective of the fact that the majority of our calls were ESP originated. UTEX 4 at the time wholly rejected as harmful this unilateral policy decision by Bell. Our efforts to 5 engage them on a mutually acceptable solution went unrequited. 6 7 More significantly, we approached the ATIS Network Interconnection Interoperability Forum for guidance in getting the routing put into place. We eventually dealt with Robin Meier, 8 the Co-Chair of the NIFF Network Inter-Operability Committee, who also happens to be an 9 AT&T employee, who informed us that the only way for us to have our 500 number block routed 10 back to us was to was to reach bi-lateral routing agreements with other LECs on a case by case 11 basis. In her AT&T capacity, she stated that should would not deal with us, even though she was 12 the most knowledgeable person at AT&T and referred us back to our account manager. 13 Meanwhile, there was clearly a "back channel" to other people at AT&T as Mr. Constable 14 inquired to our current account manager if UTEX had contacted them about 500 numbers. When 15 we did ask our account manager, she was clearly ready, and was very quick to tell us that we 16 could only "BUY" the service from AT&T as access, and there was no "PRODUCT" for "local." 17 Our solution to use "500 Numbers" was dead, at least until we could have a hearing and try and 18 get the PUC to help. 19 Of course, without AT&T participation, our product could not move forward, and we had 20 to inform our potential customers that we could not offer them this highly anticipated service 21 until we resolved the routing issues. Every day we can not offer this service due to AT&T's 22 refusal to interconnect is harmful to UTEX. 23

- 1 Q: IS THE ROUTING OF 500 NUMBERS TECHNICALLY FEASIBLE?
- 2 A: Yes, all telephony switching equipment that I am aware of can route 500 numbers. There
- 3 is nothing about the number itself which would prevent AT&T from loading these numbers into
- 4 their switches for routing to the UTEX network. In fact it was clearly contemplated and
- 5 mentioned in our ICA.
- 6 Q: WOULDN'T THIS REQUIRE AT&T TO PERFORM AN EXTRAORDINARY
- 7 NUMBER OF CONFIGURATION CHANGES TO THEIR SYSTEMS?
- 8 A: No. As a normal course of business, AT&T routinely performs maintenance on the
- 9 routing tables on ALL of their switches. The process of adding a 500 number would be no
- different from adding routing for a newly allocated block from the standard NANPA allocation
- 11 space.
- 12 Q: ARE THERE ANY OTHER OBSTACLES IN THE WAY OF UTEX PROVIDING
- 13 THE SERVICE YOU DESCRIBED?
- 14 A: Yes, there is an additional obstacle, which is an economic rather than technical or
- 15 operational issue, which goes back to the way in which AT&T and UTEX are currently
- interconnected at the SS7 layer. Currently AT&T forces UTEX to interconnect in the SS7 layer
- by using an external third party provider. This fact forces UTEX to incur costs which do not
- allow UTEX to scale services to deployments over a wide area, since we are forced to pay
- multiple per point code charges from the third party provider in each LATA in which we wish to
- 20 interconnect.
- 21 Q: IS THERE AN ALTERNATIVE WAY FOR UTEX AND AT&T TO
- 22 INTERCONNECT AT THE SS7 LAYER?

- 1 A: Yes. My understanding of the Act is that incumbents must provide facilities for any
- technologically feasible mode of interconnection. Furthermore, my understand of the Act is that
- 3 CLECs are supposed to obtain "peer" status to the incumbent. With this in mind, it would be
- 4 possible for UTEX to interconnect directly at the SS7 Layer via direct SS7 B-Link connections.
- 5 SS7 B-Links are the links that connect Signal Transfer Points ("STPs") within the same level of
- 6 hierarchy within a geographical area. With B-Link connections, UTEX would be able to
- 7 exchange traffic with AT&T at little marginal cost per incremental market. This would also
- 8 achieve an important efficiency, both in terms of cost and technical operation. Finally it would
- 9 establish UTEX properly as a peer with AT&T.

### 10 Q: HAS UTEX EVER REQUESTED B-LINK CONNECTIONS FROM AT&T?

- 11 A: Yes, on numerous occasions. In all instances, our requests were denied. In particular
- 12 internal AT&T communications indicate that one justification given is that in Mr. Douglas
- Faith's view "Interconnection is only for the exchange of local traffic and SBC's end users and
- 14 UTEX's end users" [See AT&T Texas' Response to UTEX's RFP 1-11-20] Of course, this view
- 15 would seem to deny UTEX the ability to offer wholesale services over its interconnection, which
- 16 would go against the stated decisions of the PUC and other bodies. Mr. Faith later stated
- 17 internally that the only way that AT&T would interconnect via B-Links was for UTEX to
- purchase the links as a service off of the AT&T Tariff [See AT&T Texas' Response to UTEX's
- RFP 1-10-8637] However, members of the AT&T interconnection knew that Mr. Faith's views
- were not consistent with the UTEX ICA, and said so in internal communications [See AT&T
- 21 Texas' Response to RFP 1-10-8610]. However, this internal debate did not result in any
- 22 progress for UTEX. It took nearly nine months from the time of the request for us to hear back
- an unexplained and unqualified "NO".

1	In fact, the contractual issue is quite complex. Section 6 states that for underlying
2	facilities such as B-Links, UTEX and AT&T should exchange costs for ports at an equal rate.
3	The only proviso is that either side can opt out of the arrangement if they do not wish to obtain
4	the service. However for the case of our 500 number product, if it were designed to operate
5	over B-Links obtained in that way, AT&T decision not to obtain reciprocal service from us
6	would defeat the purpose of network interoperability since such a decision would defeat callback
7	from the PSTN to UTEX's ESP customers. At the end of the day this is a simple issue.
8	AT&T's refusal to interconnect is an effective barrier to entry of UTEX's new service.
9	Q: WOULDN'T B-LINK CONNECTION PLACE A BURDEN ON THE AT&T
10	NETWORK?
1	A: No. AT&T Texas maintains a single pair of super-regional STPs for the entire five-state
12	region. We could interconnect at those points. Or, UTEX could use facilities from its ss7 Single
13	Point of Interconnection ("SPOI") in each LATA. Either way, UTEX would be able to obtain
14	SS7 signaling facilities that would remove unnecessary operational and economic constraints.
15	Q: DOES THE EXISTING ICA REQUIRE AT&T TEXAS TO DIRECTLY SIGNAL
6	WITH UTEX USING SS7 B-LINKS IF UTEX REQUESTS DIRECT SIGNALING
7	INTERCONNECTION?
8	Yes. The technical specs speak at length about B-links and clearly require a B-link connection
9	when requested.
20	
2]	Below is a Pictorial Exhibit Timeline, and table of exhibits which references the exhibits used to
22	support my testimony on the SS7 Signaling issues (directly above). I used these exhibits in
13	creating my testimony. Similar Pictorial Exhibit timelines will be used by all UTEX witnesses

- so there is a single Exhibit book, and where there is overlap less paper is produced and fewer
- trees are destroyed. The item numbers match the item numbers in our Exhibit Book.

Exhibit	Data	- Francisco	Cubicat
#	Date 36656	From Gilmore, Jerry W (SBC-OPS)	Subject
333 335	36662	Josephson, Debbie (SWBT)	UTEX-ISDN Interconnection Files
337	36664	Josephson, Debbie (SWBT)	RE: UTEX~ISDN Interconnection Order
338	36664	Clifford, Joan A (SWBT)	RE: UTEX~ISDN Interconnection Order
339	36664	Phillips, Michael (SWBT)	RE: UTEX~ISDN Interconnection Order
336	36664	Clifford, Joan A (SWBT)	RE: UTEX~ISDN Interconnection Order
340	36665	Tutwiler, Sandy (SWBT)	RE: UTEX~ISDN Interconnection Order
340	36665	Josephson, Debbie (SWBT)	UTEX~ISDN Interconnection Order
341	36665	Josephson, Debbie (SWBT)	FW: UTEX~ISDN Interconnection Order
343	36669	Josephson, Debbie (SWBT)	UTEX~ISDN Interconnection Implementation
345	36672	Nemeroff, Brett	OTEXTION interconnection implementation
362	36775	Lowell Feldman	RE: UTEX~Compensation
383	36848	Elgin III, James B (SCB-OPS)	RE: "TIP TOP" INFO REQUESTED
386	36848	Jackson, Tony L (SWBT)	FW: "TIP TOP" INOF REQUESTED
387	36848	Jackson, Tony L (SWBT)	RE: "TIP TOP" INFO REQUESTED
384	36848	Josephson, Debbie (SWBT)	RE: Fwd: RE: Block User ID
398	36921	Bruce Solis	NE. I Wu. NE. Block Osel ID
390	30321	Dide John	RE: UTEX~2005 Notification of Semi Annual CLEC
400	36929	Gary Nekula	Forecast (contractual obligation)
			FW: UTEX~2005 Notification of Semi Annual CLEC
401	36929	Josephson, Debbie (SWBT)	Forecast (contractual obligation) RE: UTEX~2005 Notification of Semi Annual CLEC
402	36929	Josephson, Debbie (SWBT)	Forecast (contractual obligation)
410	36994	Josephson, Debbie (SWBT)	Updated: UTEX~ISDN Interconnection arbitration award
411	36995	Josephson, Debbie (SWBT)	Canceled: UTEX~ISDN Interconnection
413	37000	Josephson, Debbie (SWBT)	RE: UTEX~ISDN Interconnection
414	37000	Lowell Feldman	RE: UTEX~ISDN Interconnection
415	37000	Lowell Feldman	RE: UTEX~Interconnection Arguments
416	37000	Hill, Mary A (SWBT)	RE: ASR Assistance
417	37000	Josephson, Debbie (SWBT)	RE: ASR Assistance
418	37000	Harris, Joseph (SWBT)	RE: ASR Assistance
419	37000	Tutwiler, Sandy (SWBT)	RE: New Interconnection ISDN Product????
420	37000	Hill, Mary A (SWBT)	RE: ASR Assistance
421	37002	Lowell Feldman	RE: UTEX~Interconnection Augments
422	37002	Josephson, Debbie (SWBT)	RE: UTEX~Interconnection Augments
423	37005	Harris, Joseph (SWBT)	What of this is isdn and what is ss7?
424	37005	Harris, Joseph (SWBT)	(No Subject)
			There is no entrance facility associated with this order. WE
425	37005	Harris, Joseph (SWBT)	don't have to go there.
426	37005	Josephson, Debbie (SWBT)	UTEX~ISDN Interconnection draft response to Lowell
427	37007	Harris, Joseph (SWBT)	(No Subject)
428	37008	Harris, Joseph (SWBT)	(No Subject)
429	37012	Lowell Feldman	RE: UTEX~Interconnection Arguments
430	37012	Josephson, Debbie (SWBT)	UTEX-Interconnection Augments

			RE: UTEX~Response to Letter Invoking Informal Dispute
433	37017	Lowell Feldman	Resolution
434	37019	Lowell Feldman	RE: UTEX~Response to Letter Invoking Informal Dispute Resolution
434	31013	cowell r cidifian	RE: UTEX~Response to Letter Invoking Informal Dispute
435	37019	Lowell Feldman	Resolution
	07040	an end of	RE: UTEX~Response to Letter Invoking Informal Dispute
436	37019	Lowell Feldman	Resolution RE: UTEX~Response to Letter Invoking Informal Dispute
437	37019	Josephson, Debbie (SWBT)	Resolution
		,	RE: UTEX~Response to Letter Invoking Informal Dispute
438	37019	Josephson, Debbie (SWBT)	Resolution
447	37043	Josephson, Debbie (SWBT)	RE: UTEX DEOTs FW: SBC Texas / UTEX discussions following Docket No.
456	37054	Jones, Andrew M (Legal)	29944
459	37057	Brett Nemeroff	SS7 B-Link Connections
458	37057	Brett Nemeroff	SS7 B-Link Connections
460	37058	Tutwiler, Sandy (SWBT)	RE: UTEX~Access over Local project
461	37058	Josephson, Debbie (SWBT)	FW: SS7 B-Link Connections
462	37058	Josephson, Debbie (SWBT)	FW: SS7 B-Link Connections
463	37058	Gilmore, Jerry W (SBC-OPS)	RE: SS7 B-Link Connections
465	37061	Faith, Douglas P (AIT)	RE: SS7 B-Link Connections
466	37061	Josephson, Debbie (SWBT)	FW: SS7 B-Link Connections
467	37061	Gilmore, Jerry W (SBC-OPS)	RE: SS7 B-Link Connections
468	37062	Josephson, Debbie (SWBT)	FW: SS7 B-Link Connections
469	37062	Josephson, Debbie (SWBT)	RE: SS7 B-Link Connections
470	37062	Lowell Feldman	RE: SS7 B-Link Connections
476	37062	Josephson, Debbie (SWBT)	RE: SS7 B-Link Connections
482	37071	Josephson, Debbie (SWBT)	FW: SS7 B-Link Connections
483	37071	Josephson, Debbie (SWBT)	RE: SS7 B-Link Connections
484	37071	Lowell Feldman	RE: SS7 B-Link Connections
487	37078	Josephson, Debbie (SWBT)	RE: SS7 B-Link Connections
488	37078	Josephson, Debbie (SWBT)	RE: SS7 B-Link Connections
494	37100	Cole, Bill	Letter mailed to UTEX on backbilling for no CPN
			SS-7 B-Links Status and Request for NIS Meeting for
512	37113	Lowell Feldman	establishing B-Links
521	37113	Gilmore, Jerry W (SBC-OPS)	RE: UTEX~B-Links issue discussion
528	37120	Lowell Feldman	Update RE: SS-7 B-links Status and Request for NIS Meeting for
531	37124	Lowell	establishing B-Links
533	37125	Lowell Feldman	RE: Midland Odessa Interconnection
			RE: SS-7 B-links Status and Request for NIS Meeting for
532	37125	Josephson, Debbie (SWBT)	establishing B-Links
534	37125	Tutwiler, Sandy (SWBT)	RE: Midland Odessa Interconnection
535	37125	Tutwiler, Sandy (SWBT)	RE: Midland Odessa Interconnection
536	37125	Elgin III, James B (SCB-OPS)	RE: UTEX~SS7 B-Links questions
541	37125	Lowell	RE: Midland Odessa Interconnection
542	37125	Lowell	RE: Midland Odessa Interconnection
543	37125	Lowell	B-Links RE: SS-7 B-links Status and Request for NIS Meeting for
547	37125	Lowell	establishing B-Links
537	37125	Tutwiler, Sandy (SWBT)	FW: Midland Odessa Interconnection
538	37125	Josephson, Debbie (SWBT)	RE: Midland Odessa Interconnection
539	37125	Tutwiler, Sandy (SWBT)	RE: Midland Odessa Interconnection
JJB	01 120	( diwner, dentay ( dvv b )	

540	37125	Lowell	RE: Midland Odessa Interconnection
546	37125	Lowell Feldman	RE: Midland Odessa Interconnection
544	37125	Josephson, Debbie (SWBT)	UTEX~SS7 B-Links questions
5.45	07405	La La Dilli (OMPT)	RE: SS7 B-links Status and Request for NIS Meeting for
545	37125	Josephson, Debbie (SWBT)	establishing B-Links
559	37133	Faith, Douglas P (AIT)	RE: UTEX~SS-7 B-links questions
560	37133	Josephson, Debbie (SWBT)	RE: UTEX~SS-7 B-links questions
561	37133	Josephson, Debbie (SWBT)	RE: UTEX~SS-7 B-links questions
558	37133	Faith, Douglas P (AIT)	RE: UTEX - SS-7 B-links questions
558	37134	Josephson, Debbie (SWBT)	RE: UTEX~SS-7 B-links Status
568	37135	Josephson, Debbie (SWBT)	RE: B-Link Follow-up
570	37135	Lowell	B-Link Follow-up
572	37139	Stalnaker, Paul (SWBT)	FW: Project Notifier - UTEX Lubbock
573	37139	Stalnaker, Paul (SWBT)	FW: Project Notifier - UTEX Midland
578	37142	Josephson, Debbie (SWBT)	RE: B-Link Follow-up
580	37142	Lowell	RE: B-Link Follow-up
586	37153	Josephson, Debbie (SWBT)	FW: B-Link Follow-up
589	37153	Josephson, Debbie (SWBT)	RE: B-Link Follow-up
590	37153	Lowell Feldman	RE: B-Link Follow-up
591	37159	Josephson, Debbie (SWBT)	RE: 211/311 Services
592	37160	Josephson, Debbie (SWBT)	FW: B-Link Follow-up
593	37161	Josephson, Debbie (SWBT)	RE: 211/311 Services
618	37224	Brett Nemeroff	Interconnection Efforts
619	37225	Josephson, Debbie (SWBT)	Interconnection Efforts
620	37225	Tutwiler, Sandy (SWBT)	RE: Interconnection Efforts
621	37225	Josephson, Debbie (SWBT)	FW: Interconnection Efforts
622	37225	Lowell Feldman	RE: Interconnection Efforts
623	37226	Lowell Feldman	RE: Interconnection Efforts
624	37226	Lowell Feldman	RE: Interconnection Efforts
625	37231	Tutwiler, Sandy (SWBT)	RE: Interconnection Efforts
626	37231	Lowell Feldman	RE: Interconnection Efforts
627	37232	Josephson, Debbie (SWBT)	RE: Interconnection Efforts
628	37232	Lowell Feldman	RE: Interconnection Efforts
629	37234	Gilmore, Jerry W (SBC-OPS)	RE: Interconnection Efforts
635	37303	Josephson, Debbie (SWBT)	RE: UTEX codes in Kingsville and Corpus
651	37377	Brett Nemeroff	Updated Trunk Forecasts
655	37380	Josephson, Debbie (SWBT)	RE: A Question
			UTEX Tariff No. 1 Invoices #125, 126, 127, 128 and 129 to
661	37401	Rich Lewis	at&t
665	37415	Josephson, Debbie (SWBT)	FW: UTEX Tariff No. 1 Invoices #125, 126, 127, 128 and 129 to at&t
000	31413	cosephson. Debble (GVVDT)	RE: UTEX Communications Corp Processing of this 500
703	37555	Fears, Nancy	PCS Application Has been Suspended
			RE: UTEX Communications Corp Processing of this 500
123	37558	DeHaven, Brian	PCS Application Has been Suspended
710	37573	Josephson, Debbie (SWBT)	UTEX Tariff No. 1 Invoice #155 to at&t
711	37574	Josephson, Debbie (SWBT)	RE: UTEX IGI-POP tariff
740	07574	City - 1 - 1 (4 (0B) 0B)	RE: UTEX Tariff No. 1 Invoices #125, 126, 127, 128 and
712	37574	Gilmore, Jerry W (SBC-OPS)	129 to at&t
716	37630	Meier, Robin	RE: 500-NXX routing between networks
715	37630	Hall, Gia S (SBC-OPS)	RE: UTEX
721	37651	Constable, Jason (SBC-OPS)	FW: UTEX ICA
736	37755	Josephson, Debbie (SWBT)	RE: Trunk Forecasts

737 37755 Constable, Jason (SBC-OPS) RE: Trunk Forecasts

742 37813

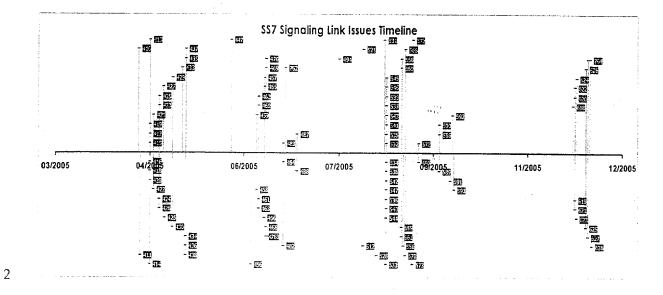
753 37856

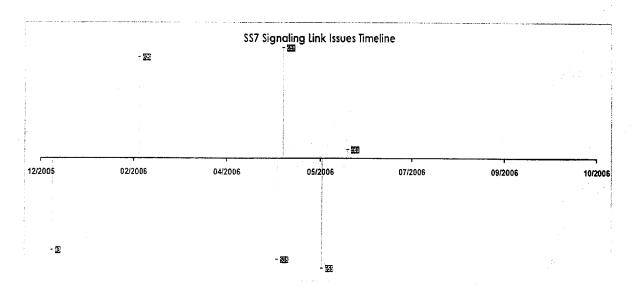
Hall, Gia S (ATTOPS)

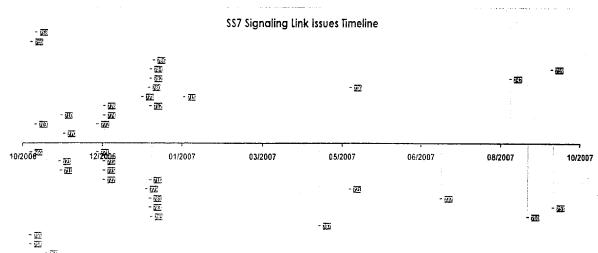
Patterson, Judith A (ATTOPS)

RE: UTEX DEOT study to switch HSTQTXRG6MD point code 005-096-184 Houston market

FW: Trunk Forecasts







- 1 Q: DID UTEX MEET ITS OBLIGATIONS, AS SPELLED OUT IN THE DOCKET
- 2 NO. 29944 ARBITRATION AWARD, FOR OBTAINING ISON INTERCONNECTION?
- 3 A: Yes.

- 5 Q: HAS UTEX "MODIFED ITS NETWORK ELEMENTS TO PERFORM AS A
- 6 CLASS 5 SWITCH?"
- 7 A: Yes. "A Class 5 switch, in United States telephony jargon refers to a telephone switch or
- 8 exchange located at the local telephone company's central office, directly serving subscribers.
- 9 Class 5 switch services include basic dial-tone, calling features, and additional digital and data
- services to subscribers using the local loop."
- 11 http://en.wikipedia.org/wiki/Class 5 telephone switchUTEX's switching fabric has all the
- 12 functionalities and affords all the capabilities of traditional end office switches that serve end
- users, plus a whole lot more.
- ISDN interconnection really has little if anything to do with the functionalities that are
- 15 available to end users, other than the ability to make and receive phone calls that must traverse
- multiple networks. "Interconnection is the linking of two networks for the mutual exchange of
- traffic. This term does not include the transport and termination of traffic." 47 C.F.R. § 51.5. We
- are discussing the physical interface between AT&T Texas and UTEX and the signaling protocol
- between the two networks. Nonetheless, yes, all of UTEX's network elements<sup>4</sup> can operate like a
- 20 Class 5 switch.

Section 153(29) defines "network element": "Network element.--The term "network element" means a facility or equipment used in the provision of a telecommunications service. Such term also includes features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service." All telecommunications carriers have network elements. They are not unique to ILECs

- 1 Q: HAS UTEX MODIFIED ITS NETWORK ELEMENTS TO PROVIDE
- 2 **SIGNALING?**
- 3 A: Yes. We are prepared to signal with AT&T Texas using Q.931, just like the ICA says.
- 4 Q: HAS UTEX MODIFIED ITS NETWORK ELEMENTS TO PROVIDE BILLING?
- 5 A: Yes. We have the ability to issue bills.
- 6 Q: HAS UTEX MODIFIED ITS NETWORK ELEMENTS TO PROVIDE ERROR
- 7 TREATMENT?
- 8 A: Yes. Error treatment will generally follow generally accepted practices and policies of the
- 9 PSTN.
- 10 O: DOES YOUR ERROR TREATMENT GENERALLY FOLLOW GENERALLY
- 11 ACCEPTED PRACTICES AND POLICIES OF THE PSTN?
- 12 A: Yes.
- 13 O: HAS UTEX "ENSURE[D] THAT ITS CLASS 5 SWITCH OR EQUIVALENT
- 14 SHALL ALSO PERFORM, INCLUDING BUT NOT LIMITED TO, THE FOLLOWING
- 15 FUNCTIONS: (1) DIAL TONE TO END USERS VIA LINE/LOOP CONNECTIONS
- 16 CONTAINING CUSTOMER ASSIGNABLE NPA/NXXS (TELEPHONE NUMBERS), (2)
- 17 CONNECTS TO OTHER CLASS 5 END OFFICE SWITCHES AND TANDEM
- 18 SWITCHES VIA VOICE GRADE TRUNKING CONNECTIONS, (3) PROVIDES
- 19 PROTOCOL INTER-WORKING, AND (4) MEETS FEDERAL REQUIREMENTS FOR
- 20 LNP."
- 21 A: We can do each of these things. We in fact do each of these things.
- 22 Q: DOES UTEX ADHEAR TO THE GUIDELINES AS SET FORTH IN 47 C.F.R.
- 23 § 52.26 AND THE WORKING GROUP REPORT?

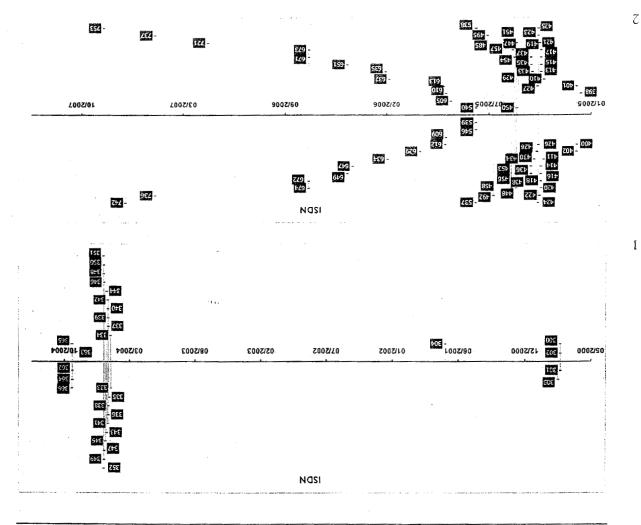
- 1 A: Yes. We meet each of those requirements. We fully support both porting in and porting
- 2 out, and we can do so for all customers served using ISDN interconnection.
- Below is a pictoral representation, and a table of the Exhibits that relate to ISDN

### 4 interconnection issues:

Exhibit	Date	From	Subject
301	35293	Smith, Keisha (SWBT)	UTEXISDN interconnection
302	35294	Dayman, Jacqueline J (SWBT)	RE: UTEX (ISDN Interconnection) mtg. RE: Internal NIT mtg to discuss UTEX 8-23-00
303	35301	Hees, Jerry D (SWBT)	1pm RE: UTEX Communications - Renegotiation of
304	35638	Feldman, Lowell	Texas Interconnection agreement
333	36656	Gilmore, Jerry W (SBC-OPS)	· ·
334	36658	Josephson, Debbie (SWBT)	FW: ISDN Interconnection Files
335	36662	Josephson, Debbie (SWBT)	UTEX-ISDN Interconnection Files
337	36664	Josephson, Debbie (SWBT)	RE: UTEX~ISDN Interconnection Order
338	36664	Clifford, Joan A (SWBT)	RE: UTEX~ISDN Interconnection Order
339	36664	Phillips, Michael (SWBT)	RE: UTEX~ISDN Interconnection Order
336	36664	Clifford, Joan A (SWBT)	RE: UTEX~ISDN Interconnection Order
340	36665	Tutwiler, Sandy (SWBT)	RE: UTEX~ISDN Interconnection Order
341	36665	Josephson, Debbie (SWBT)	UTEX~ISDN Interconnection Order
342	36665	Josephson, Debbie (SWBT)	FW: UTEX~ISDN Interconnection Order
343	36669	Josephson, Debbie (SWBT)	UTEX~ISDN Interconnection Implementation
344	36670	Gilmore, Jerry W (SBC-OPS)	FW: Status of Informal Dispute Resolution
345	36672	Nemeroff, Brett	
346	36677	Clifford, Joan A (SWBT)	RE:
			FW: Utex Exhibit 1 forms for Houston ISDN
347	36677	Marshall, Fondra B (SWBT)	interconnection
0.40	20070	Cliffered India A (C)MDT)	RE: Utex Exhibit 1 forms for Houston ISDN
348	36678	Clifford, Joan A (SWBT)	interconnection RE: Utex Exhibit 1 forms for Houston ISDN
349	36678	Josephson, Debbie (SWBT)	interconnection
0.0	000.0	Cocopitocii. Educio (CVE.)	RE: Utex Exhibit 1 forms for Houston ISDN
350	36678	Clifford, Joan A (SWBT)	interconnection
352	36679	Brett Nemeroff	RE: UTEX~911
351	36679	Gilmore, Jerry W (SBC-OPS)	FW: Informal Dispute Status
362	36775	Lowell Feldman	RE: UTEX~Compensation
363	36775	Josephson, Debbie (SWBT)	UTEX~Compensation
364	36775	Josephson, Debbie (SWBT)	FW: UTEX~Compensation
365	36776	Gilmore, Jerry W (SBC-OPS)	RE: UTEX~Compensation
366	36776	Josephson, Debbie (SWBT)	RE: UTEX~Compensation
398	36921	Bruce Solis	
400	36929	Gary Nekula	RE: UTEX~2005 Notification of Semi Annual CLEC Forecast (contractual obligation) FW: UTEX~2005 Notification of Semi Annual
401	36929	Josephson. Debbie (SWBT)	CLEC Forecast (contractual obligation) RE: UTEX~2005 Notification of Semi Annual
402	36929	Josephson, Debbie (SWBT)	CLEC Forecast (contractual obligation)

			Updated: UTEX~ISDN Interconnection arbitration
410	3 <b>6994</b>	Josephson, Debbie (SWBT)	award
411	36995	Josephson, Debbie (SWBT)	Canceled: UTEX~ISDN Interconnection
413	37000	Josephson, Debbie (SWBT)	RE: UTEX~ISDN Interconnection
414	37000	Lowell Feldman	RE: UTEX~ISDN Interconnection
415	37000	Lowell Feldman	RE: UTEX~Interconnection Arguments
416	37000	Hill, Mary A (SWBT)	RE: ASR Assistance
417	37000	Josephson, Debbie (SWBT)	RE: ASR Assistance
418	37000	Harris, Joseph (SWBT)	RE: ASR Assistance
419	37000	Tutwiler, Sandy (SWBT)	RE: New Interconnection ISDN Product????
420	37000	Hill, Mary A (SWBT)	RE: ASR Assistance
421	37002	Lowell Feldman	RE: UTEX~Interconnection Augments
422	37002	Josephson, Debbie (SWBT)	RE: UTEX~Interconnection Augments
423	37005	Harris, Joseph (SWBT)	What of this is isdn and what is ss7?
424	37005	Harris, Joseph (SWBT)	(No Subject)
727	07000	riaris, sosepii (CVVD1)	There is no entrance facility associated with this
425	37005	Harris, Joseph (SWBT)	order. WE don't have to go there.
		(0.00)	UTEX~ISDN Interconnection draft response to
426	37005	Josephson, Debbie (SWBT)	Lowell
427	37007	Harris, Joseph (SWBT)	(No Subject)
428	37008	Harris, Joseph (SWBT)	(No Subject)
429	37012	Lowell Feldman	RE: UTEX~Interconnection Arguments
430	37012	Josephson, Debbie (SWBT)	UTEX~Interconnection Augments
		,	RE: UTEX~Response to Letter Invoking Informal
433	37017	Lowell Feldman	Dispute Resolution
			RE: UTEX~Response to Letter Invoking Informal
434	37019	Lowell Feldman	Dispute Resolution
			RE: UTEX~Response to Letter Invoking Informal
435	37019	Lowell Feldman	Dispute Resolution
406	27010	Louist Coldman	RE: UTEX~Response to Letter Invoking Informal
436	37019	Lowell Feldman	Dispute Resolution RE: UTEX~Response to Letter Invoking Informal
437	37019	Josephson, Debbie (SWBT)	Dispute Resolution
401	37013	Josephson, Debble (GVVB1)	RE: UTEX~Response to Letter Invoking Informal
438	37019	Josephson, Debbie (SWBT)	Dispute Resolution
447	37043	Josephson, Debbie (SWBT)	RE: UTEX DEOTs
448	37047	Lowell Feldman	RE: UTEX~Access over Local project
451	37047	Josephson, Debbie (SWBT)	RE: UTEX letter
453	37049	Cole, Bill (SBCSI)	utex
454	37051	Josephson, Debbie (SWBT)	RE: UTEX~Access over Local trunks
707	0,001	Cocopilatin, Bessie (CVB)	FW: SBC Texas / UTEX discussions following
456	37054	Jones, Andrew M (Legal)	Docket No. 29944
457	37055	Cole, Bill (SBCSI)	BI msgs
458	37057	Brett Nemeroff	SS7 B-Link Connections
485	37072	Cole, Bill (SBCSI)	UTEX,
492	37091	Cole, Bill (SBCSI)	RE: UTEX Conference call
495	37103	Gilmore, Jerry W (SBC-OPS)	RE: bills
	37103	Tutwiler, Sandy (SWBT)	FW: Midland Odessa Interconnection
537			RE: Midland Odessa Interconnection
538	37125	Josephson, Debbie (SWBT)	
539	37125	Tutwiler, Sandy (SWBT)	RE: Midland Odessa Interconnection
540	37125	Lowell	RE: Midland Odessa Interconnection
546	37125	Lowell Feldman	RE: Midland Odessa Interconnection

605	37174	Parker, David (SWBT)	RE: Waller Creek arbitration
609	37183	Cole, Bill (SBCSI)	UTEX usage
610	37183	Cole, Bill (SBCSI)	UTEX usage
612	37184	Heinmiller, Wayne (SBCSI)	Legal/Regulatory Activity Update
613	37187	Cole, Bill (SBCSI)	RE: UTEX usage
629	37234	Gilmore, Jerry W (SBC-OPS)	RE: Interconnection Efforts
632	37296	Hobson, Jason M (SBCSI)	UTEX
634	37299	Schwob Jr., John J (SWBT)	UTEX
635	37303	Josephson, Debbie (SWBT)	RE: UTEX codes in Kingsville and Corpus
647	37366	Cole, Bill (SBCSI)	CPN module
651	37377	Brett Nemeroff	Updated Trunk Forecasts
649	37377	Cole, Bill (SBCSI)	MOKA no Mod164
			RE: AT&T Southwest Local spreadsheet re:
671	37453	Cole, Bill (SBCSI)	UTEX
670	37453	Barry Dickerson, Pamela Y	RE: AT&T Southwest Local spreadsheet re:
672	37453	(SBCSI)	UTEX RE: AT&T Southwest Local spreadsheet re:
673	37453	Cole, Bill (SBCSI)	UTEX
0,0	0, 100	33.5, 2 (32.3.)	RE: AT&T Southwest Local spreadsheet re:
674	37453	Cole, Bill (SBCSI)	UTEX
721	37651	Constable, Jason (SBC-OPS)	FW: UTEX:ICA
736	37755	Josephson, Debbie (SWBT)	RE: Trunk Forecasts
737	37755	Constable, Jason (SBC-OPS)	RE: Trunk Forecasts
			RE: UTEX DEOT study to switch
	07010	H. W. C. (2.44-T-0.D.C.)	HSTQTXRG6MD point code 005-096-184
742	37813	Hall, Gia S (ATTOPS)	Houston market
753	37856	Patterson, Judith A (ATTOPS)	FW: Trunk Forecasts



# 2 Q: WHAT CONSTITUTES VALID OR ADEQUATE CPN UNDER THE ICA?

- 3 A: First of all, the ICA does not have an express definition of "CPN" in either
- 4 Attachment 12 or in the GTC definitions.<sup>5</sup> All that exists in this regard is Attachment 12 §§ 2.2
- 5 and 2.3 and the definitions in Section 53 which are expressly incorporated by Attachment 12
- 6 § 1.2.1. Section 2.2 and 2.3 generally describe "originating calling number." As § 2.3 makes
- 7 clear, "originating Calling Party Number" does not have to always be something that is conveyed
- 8 in the SS7 ISUP IAM CPN parameter. When the interconnection is MF, then ANI<sup>7</sup> rather than
- 9 CPN is used. When the interconnection is ISDN, then the ISDN information element for CPN is
- signaled on the "D" channel rather than through the SS7 network. See Attachment 25 ISDN
- 11 Interconnection Methods, Appendix A, Technical Implementation.

### 12 O: DOES THE ICA DEFINE CPN? IF SO, WHAT IS THAT DEFINITION?

GTC § 53 (Definitions) applies by virtue of Attachment 12 § 1.2.1. While there is not a definition of "CPN" in the GTC definitions, GTC § 53.1 states that "A defined word intended to convey its special meaning is capitalized when used. Other terms that are capitalized and not defined in this Agreement will have the meaning in the Act." The Act does not have a definition of "CPN" but the FCC's rules do, and the FCC definition at least arguably could be applied or used for guidance when the parties use SS7. That definition is contained at 47 C.F.R. § 64.1600(c):

<sup>&</sup>lt;u>Calling party number</u>. The term "Calling Party Number" refers to the subscriber line number or the directory number contained in the calling party number parameter of the call set-up message associated with an interstate call on a Signaling System 7 network.

The FCC definition refers to "the subscriber line number or directory number" but provides no additional guidance on what those terms mean.

<sup>2.2</sup> Each Party will include in the information transmitted to the other for each call being terminated on the other's network (where available), the originating Calling Party Number (CPN).

<sup>2.3</sup> The type of originating calling number transmitted depends on the protocol of the trunk signaling used for interconnection. Traditional toll protocol will be used with Multi-Frequency (MF) signaling, and Automatic Number Identification (ANI) will be sent either from the originating Parties end office switch to the terminating Parties tandem or end office switch. ISDN used for interconnection will be as defined in attachment 25 Appendix ISDN Interconnection.

Sec 47 C.F.R. § 64.1600(b) [10b] ANI. The term "ANI" (automatic number identification) refers to the delivery of the calling party's billing number by a local exchange carrier to any interconnecting carrier for billing or routing purposes, and to the subsequent delivery of such number to end users."]

1	A: While CPN is a term that is commonly and readily recognized in the industry, the
2	meaning and interpretation of the term depends critically on the context in which it is used. The
3	four primary contexts in which the term is defined are the contexts of: signaling, routing, rating
4	and policy.
5	In a signaling context, SS7 ISUP and other ISDN signaling specifications, such as ANSI
6	T.1-113.1—95 and related specifications from other standardizing bodies (c.f. GR-246-CORE),
7	provide the standard meanings of terms. In ANSI ISUP, the CPN parameter is an optional and
8	variable length message parameter which is defined as:
9 10 11 12 13	Calling Party Number: Information sent in the forward direction to identify the calling party and consisting of the odd/even indictor, nature of address indicator, numbering plan indicator, address presentation restriction indicator, screening indicator, and address signals.
14	This definition is typical for signaling specifications which explicitly define syntax and
15	purposefully avoid specific semantic concepts such as validity. As such it is important to
16	understand that signaling specifications do:
17 18 19 20 21 22 23	"not" require 10 and only 10 numeric characters to be sent; "not" require the number to be a valid LERG number; "not" prohibit 8YY numbers from being sent as CPN; "not" prohibit non-geographic numbers from being used as CPN; and "not" require only geographic numbers.  In a routing context, CPN has absolutely no relevance, since call routing logic operates
24	on the Called Party Number. In a rating context, CPN generally, per industry standard practice,
25	has little or no import or conventional use. It has no "validity" concept. Typically call rating
26	logic operates on static trunk group configuration information and or Charge Number ("CN")
27	information derived from signaling. As an example, AT&T's own billing system diverges from
28	industry standard practice and does not place the CPN digits in the AMA Originating Number
29	field in the Structure Code 0625 Table 14. Instead AT&T places the Terminating Billing

- 1 Account number ("T-BAN") in this field. CPN information present in the signaling is recorded
- 2 instead in a Module 164 record Table 126, despite the fact that per the specification the purpose
- of this record is to provide "the means to record lengthy numbers that cannot be recorded in the
- 4 structure applicable to the call" [GR-1083-CORE, GR-1100-CORE, GR-1504-CORE, GR-3058-
- 5 CORE]. Again, in this case, CPN clearly has no industry standard validity concept. AT&T has
- 6 in fact admitted that its use of CPN is not pursuant to industry standard practice. [RFI 1-4
- 7 (original 9/4/07 response); see also AT&T Omnibus Response to UTEX, p. 12 (9/25/07)].
- 8 AT&T is actually not using AMA as it was designed to be used when it comes to CPN. Their
- 9 approach is not industry standard.
- Finally, in a policy context, while the 1996 Act does not have a definition of CPN, the
- FCC has a CPN definition that at least arguably could be applied or used for guidance when the
- parties use SS7. That definition, which is contained at 47 C.F.R. § 64.1600(c), is as follows:
- Calling party number. The term "Calling Party Number" refers to the
- subscriber line number or the directory number contained in the calling
- party number parameter of the call set-up message associated with an
- interstate call on a Signaling System 7 network.

### Q: IS THE DEFINITION AMBIGIOUS?

- 18 A: Although the term CPN does not have a definition per se, UTEX does not believe that the
- 19 existing ICA is ambiguous. However, what is wholly unsupported by the ICA, industry
- 20 standards, and standard industry practice is a concept of validity which can be usefully and
- 21 universally applied to CPN. Moreover, UTEX believes that the very concept of CPN "validity"
- is itself harmful to technology and innovation.
- 23 Q: ARE THERE ANY CONCEPTS OR NOTIONS THAT ARE USEFUL AND
- 24 HELPFUL TO TECHNOLOGY AND INNOVATION?

1	AT&T focuses on their harmful and technological retrograde concept of "validity."
2	UTEX has instead focused on a notion of fidelity. By our business practices and per our tariff,
3	we do not manipulate the CPN parameter in any way, in an effort to forestall accusations of
4	impropriety. We were very concerned about such accusations since AT&T and Verizon accused
5	several ESPs and CLECs of wrongdoing when one or the other actively changed the information
6	in the CPN parameter. Ours is a temporary solution aimed at facilitating interoperability of the
7	PSTN with Internet originated calling originating from Enhanced Service Providers. To date,
8	UTEX's active and repeated efforts to establish a joint policy and solution have been totally
9	rebuffed by AT&T.
10	Q: DO YOU SEE ANY OTHER PROBLEMS WITH AT&T'S ATTEMPT TO
11	INSERT "VALID" IN FRONT OF "CPN" AND THEN UNILATERALLY DEFINE
12	WHAT "VALID" MEANS?
13	A: AT&T has unilaterally attempted to impose its own concept of validity on the ICA.
14	AT&T would have you believe that the word "valid" appears next to the term CPN in
15	Attachment 12 § 7.5. This is simply not the case. The term "CPN" as used in the current
16	agreement does not have the definite and immutable and exclusive meaning AT&T Texas
17	ascribes to it, and the specific criteria now stated by AT&T Texas cannot be found anywhere in
18	the contract and are inconsistent with the practice of the Parties after the contract was formed. It
19	simply cannot be the case that AT&T Texas' current validity criteria are and always have been a
20	necessary part of the Agreement.
21	While AT&T's validity concept has no place next to the word CPN in the ICA, neither
22	has it received a consistent definition from its progenitor. AT&T Texas' current CPN validity
23	concept requires a 10 digit, non SYY active number that is already included in the Local

1 Exchange Routing Guide (LERG). This definition however is much different than the criterion 2 AT&T Texas described for the first time to UTEX in August of 2005. At that time, AT&T Texas 3 stated that all they wanted to see was 10-digit CPN. This representation was made a few days 4 before the joint testing that occurred on August 30, 2005. It was repeated orally during the 5 conference call that was held while the test was proceeding. During the joint test, AT&T Texas 6 and its engineers specifically stated that AT&T Texas was only looking to see if 10 digits were passed and stated as an example that "999-999-9999" was a good CPN. AT&T Texas did not 7 explain any additional criteria, or any additional methods which they used to rate calls based 8 9 upon CPN content. Further, AT&T was certainly made aware that UTEX did not agree with any CPN 10 11 content criteria other than passing upstream exactly what was given to UTEX by its customer. 12 While not compelled by the contract, UTEX was willing to negotiate with AT&T Texas over the matter, and sought to do so for many months, to no avail. When AT&T Texas discovered that 13 14 test results showed that UTEX's ESP customers were in fact passing 10 digits on more than 90% 15 of the calls, AT&T Texas was left in the difficult and uncomfortable position of having to invent a new definition of validity to justify the bills it had already sent to UTEX for non-delivery of 16 17 CPN. That was not the only time AT&T changed their definition in mid-stream. In the context 18 19 of the negotiations for a replacement agreement to the current contract, AT&T Texas proposed that AT&T Texas and UTEX implement the following definition on February 6, 2002: "Calling 20 Party Number (CPN) identifies the specific station set originating a call." Furthermore, AT&T 21 Texas own network engineering documents (NIS worksheet) for Austin interconnect, produced 22 23 almost a year after the joint testing, states that AT&T Texas switching equipment would be

- sending 7-digit CPN to UTEX and that AT&T Texas expected 7-digit from UTEX in that
- 2 market, at least for certain end offices.
- 3 Q: AND IF "CPN" IS AMBIGUOUS, WHAT WAS THE INTENTION OF THE
- 4 PARTIES AT THE TIME OF CONTRACT FORMATION?
- Attachment 12 § 2.2 simply stated that CPN must be passed where available and that the 5 A: 6 parties supply CPN with the intended purpose of purely identifying the calling party and 7 providing for call back capability where possible. It is also worth returning to AT&T Texas' 8 own NIS worksheets. For example, NIS worksheets were used by UTEX and AT&T Texas for 9 interconnection implementation in the Abilene LATA (executed May 28, 2002) and the Austin 10 LATA (first executed May 28, 2002, most recent version revised May 11, 2006). 11 documents contain a representation concerning the CPN information that AT&T Texas says it 12 requires, requests or will send. The Abilene LATA worksheet has a list of specific end offices. The notes to that list contain these two statements: "SWB will send 7 or 10 digits in the called 13 party number field from these end offices" and "[u]ntil LNP, SWB can receive 7 digits in the 14 15 called party number field at these end offices." The original Austin worksheet (in 2002) and the 16 most recent Austin worksheet (in 2006) both have these two statements: "SWB will send 7 or 10 digits in the called party number field from these end offices" and "[t]he Austin MSA is LNP, so 17 18 SWB can receive 10 digits in the called party number field in the offices in the Austin MSA." Nowhere on these documents does AT&T Texas state that 10 digits are mandatory and only 10 19 20 digit CPN is "valid." To the contrary the documents show that AT&T Texas may not be sending 21 10 digits in the CPN field, and may in fact send only 7 because of limitations in its own network. 22 The documents show that AT&T Texas understood and expected that UTEX might send traffic 23 that has signaled something other than 10 digits in the CPN address field. AT&T Texas does not 24 (or until recently did not) always send 10-digits in the CPN parameter for AT&T Texas

- 1 originating traffic. For several years AT&T Texas wanted CLECs to send 7-digit CPN for
- 2 CLEC-originated traffic addressed to certain AT&T Texas end offices until AT&T Texas'
- 3 switches became LNP-capable. Accordingly, it would have been impossible to comply with a
- 4 10-digit requirement in 1998 when the WCC agreement went into effect. Indeed, AT&T Texas
- 5 still had the end office switch limitation in 2004 when the Parties were implementing
- 6 interconnection between UTEX and AT&T.

### 7 Q: DO THE APPLICABLE SS7 STANDARDS PROVIDE THAT 8YY NUMBERS

- 8 ARE NOT ACCEPTABLE CONTENT FOR THE CPN ADDRESS FIELD?
- 9 A: The telecommunications industry has purposefully crafted signaling and billing
- 10 specifications to contain compatible but logically disjoint criteria for message semantics. This
- allows for the widest possible application of the technology and allows the maximum flexibility
- 12 and extensibility. As such, SS7 standards such as ANSI T.1-113-1995 and Telcordia GR-246-
- 13 CORE, are silent on CPN validity. The standards are drafted to allow many different kinds of
- 14 "CPN" including VoIP-based calling party information (the T1.113 specification expressly
- discusses "data services" and that is what VoIP technically is) that are completely inconsistent
- with AT&T Texas' many "validity" criteria.
- 17 UTEX exclusively intermediates traffic from IP originated telecommunications endpoints
- addressed to the PSTN via ESP intermediaries. Some of these intermediaries choose to emulate
- 19 PSTN numbering. For these endpoints, the CPN passed to AT&T will resemble CPN that might
- 20 have originated from the PSTN. However, unlike Legacy telephony protocols, IP telephony
- 21 protocols universally do not require endpoints to be addressed using a PSTN (10-digit NANP)
- 22 number. A large fraction of the traffic passed to AT&T comes from ESPs who choose not to
- 23 emulate PSTN endpoints, since this emulation is costly and unnecessary. Generally speaking.
- 24 the decision to implement emulation is born out of fear of litigation and anti-competitive

1	incumbent practices, and is not mandated by the underlying technology. However, some ESPs
2	have chosen to use 10-digit numbering plans, which do not provide direct PSTN emulation, and
3	as a result, the CPN provided fails AT&T's validity criterion, even though they numbers are
4	perfectly valid PSTN numbers. An example is an ESP that presents uniform 8YY originating
5	numbers, but provides callback multiplexing.
6	Unfortunately, the alternative number schemes used by IP telephony endpoints are poorly
7	expressed in Legacy protocols, including SS7 and AMA. As a result the CPN transmitted to
8	AT&T generally looks un-PSTN-like to AT&T's systems. And there is a reason for that.
9	Q: DO THE APPLICABLE TELCORDIA RELEASES RELATED TO AMA
10	BILLING METHODS PROVIDE THAT (1) THE INFORMATION POPULATED IN
11	THE SS7 ISUP IAM CPN ADDRESS FIELD CAN AND MUST BE ONLY 10 DIGITS; (2)
12	CANNOT INCLUDE A COUNTRY CODESYY NUMBERS; AND (3) MUST BE A
13	NANP-ISSUED GEOGRAPHIC-BASED E.164 NUMBER THAT IS ACTIVE IN THE
14	LERG?
15 16	A: No. Telcordia releases prescribe none of these things. Just as signaling specifications
17	are silent on billing syntax and semantics, billing specifications are silent on signaling syntax and
18	semantics. In particular, Telcordia AMA specifications [GR-1100-CORE], as stated above, per
19	industry standard practice, signaling and billing standards are notionally decoupled as to provide
20	the configuration and the billion and appearable like.
	maximum flexibility, applicability and extensibility.
21	This does not mean that signaling information is always reliably represented in the billing
21 22	
	This does not mean that signaling information is always reliably represented in the billing